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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,294

04/20/2007

Takahiro Umekawa

4731-0135PUS1

2933

2292 7590 09/01/2009
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EXAMINER

CHARLES, MARCUS

ART UNIT

PAPER NUMBER

3656

NOTIFICATION DATE

DELIVERY MODE

09/01/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/582,294	Applicant(s) UMEKAWA, TAKAHIRO	
	Examiner Marcus Charles	Art Unit 3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6-12-2006 & 8-28-2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is the first action relating to serial application number 10/582,294 filed 04-20-2007.

Claims 1-11 are currently pending.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The examiner has accepted the drawing filed with this application as formal drawing.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-6, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita et al. (4,721,441) in view of Desalve (4,285,632) and Mavrosakis (7,104,693). Miyashita et al. discloses a turbocharger bearing assembly (fig. 17), comprising a substantially cylindrical inner ring (17) fitted on an inner periphery of the rotary shaft and formed with inner raceways on its outer periphery at places adjacent to opposite ends thereof; a pair of outer rings (not labeled) mounted to the housing as spaced away from each other with respect the axial direction of rotary shaft and formed with outer raceways on their inner peripheries in opposing relation with the

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inner raceways; a plurality of rolling elements rollably interposed between respective inner raceways of the inner ring and the respective outer races of the outer rings; a pair sleeves (13, 14) interposed between the outer rings as defining a gap there between and opposing each other with respect to the axial direction of the rotary shaft; a spring (15) interposed between the springs for biasing the outer rings via sleeve in axially outward direction with respect to the rotary shaft, thereby applying a preload to the bearings. Miyashita et al. does not disclose the inner ring is formed with inner ring raceways on its outer periphery at places adjacent to the ends. Mavrosakis discloses a turbocharger bearing assembly comprising an inner ring (see fig. 4), which is formed with inner raceways at places to opposite ends thereof. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the inner ring of Miyashita et al. so that is one piece item having inner raceways at the adjacent ends in view of Mavrosakis in order to reduce manufacturing cost avoid using multiple parts for one item. In addition, Miyashita et al. fails to disclose each of the pair of sleeves is formed with an engaging portion on its outer periphery. Desalve discloses a turbocharger bearing assembly comprising a tube (60) passing through the sleeves (44-44) for supplying oil to the bearing assembly. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Miyashita et al. to include the tube passing through the sleeves in view of Desalve in order to supply oil to the bearing and inherently prevent the sleeves from rotating.

In claims 3 and 6, note the notch (see attached drawing illustration).

In claims 5, 9 and 10, note Mavrosakis discloses the recess in the inner ring inner surface providing a gap between the shaft and the inner ring.

Regarding claim 2, fail to disclose the material of the sleeve is formed of resin. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the sleeve of Miyashita et al. so that it is formed from resin because it is well known in the art that items form from resin are lightweight and resistance adverse atmospheric element and without compromising strength. In addition, it would have been obvious to one of ordinary skill in the art at the time of the invention to (?), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

5. Claims 4, 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita et al. in view of Desalve as applied to claim1 above, and further in view of Greenwald (2,973,136). The combination of Miyashita et al. and Desalve do not disclose a seal between the sleeve and the inner ring. Greenwald discloses a turbocharger bearing assembly comprising a sleeve and an inner ring providing a gap therebetween, a seal between the sleeve and the inner ring. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the device of Miyashita et al. to include the seal as disclose by Greenwald in order to prevent an contaminant from entering the bearing and to maintain lubricant within the bearing. In addition, the type of seal was not disclose and the dimension of the gap. It would have been obvious to one of ordinary skill in the art at the time of the

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invention to modify the seal so that it is a labyrinth seal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Miyashita et al. so as to include the values as claimed, since it has been held that where the general conditions of a claim is disclosed in the prior art, discovering the optimum ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

In claim 11, note Mavrosakis discloses the recess in the inner ring inner surface providing a gap between the shaft and the inner ring.

Citation

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the prior art cited in attached PTO Form 892.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marcus Charles
/Marcus Charles/
Primary Examiner, Art Unit 3656

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